

Inventors: Kaiser et al. Sheet 1 of 7  
Filed: December 12, 2001  
Title: LINE CONDITIONER AND BUILD-OUT  
FOR TELEPHONE SYSTEMS

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Mark Joy (312) 616-5600  
Leydig, Voit & Mayer Our Ref: 213745

26 AWG 15K ft total length

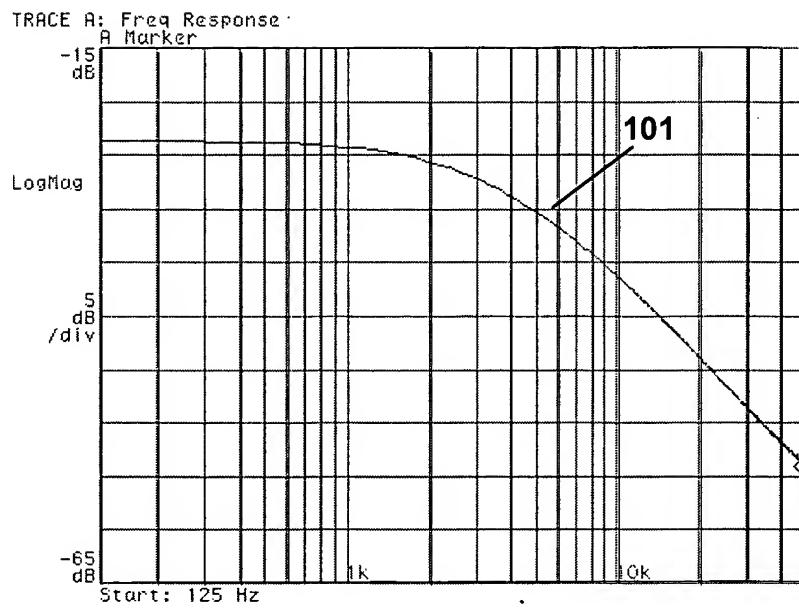


FIG. 1

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26 AWG 15K ft total length, Load Coils at 3K ft and 9K ft

TRACE A: Freq Response  
A Marker  
D Marker

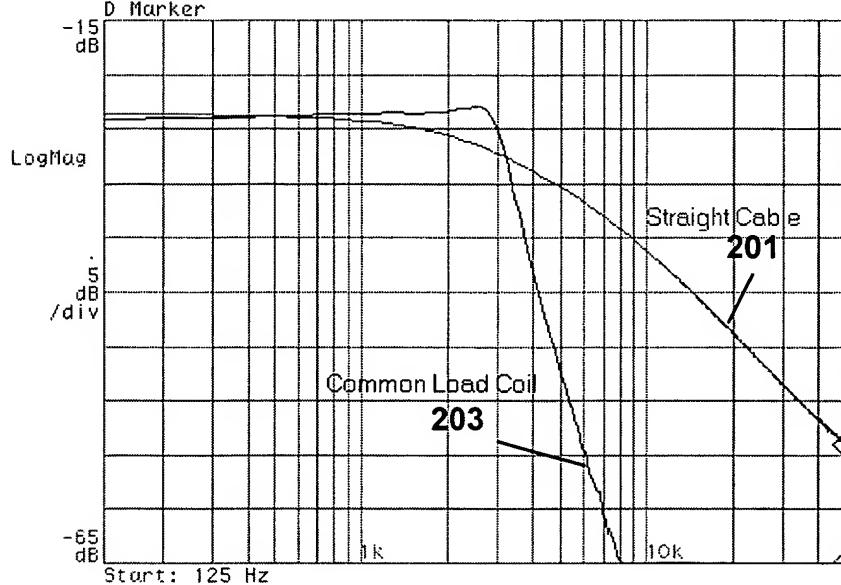


FIG. 2

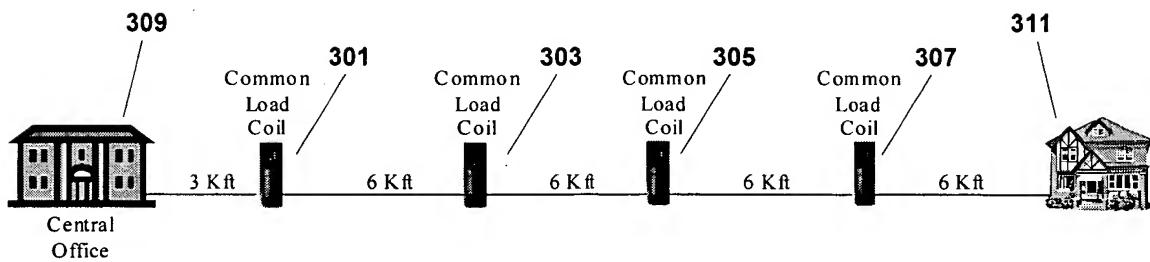


FIG. 3

26 AWG 15K ft total length, Load Coils at 3K ft and 9K ft

TRACE B: D2 Freq Response

A Marker  
B Marker  
D Marker

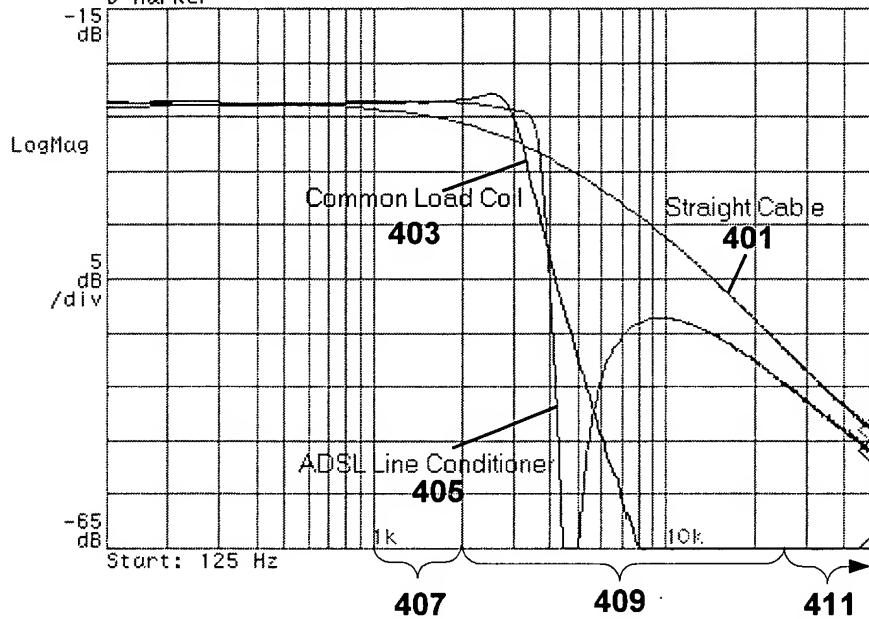


FIG. 4

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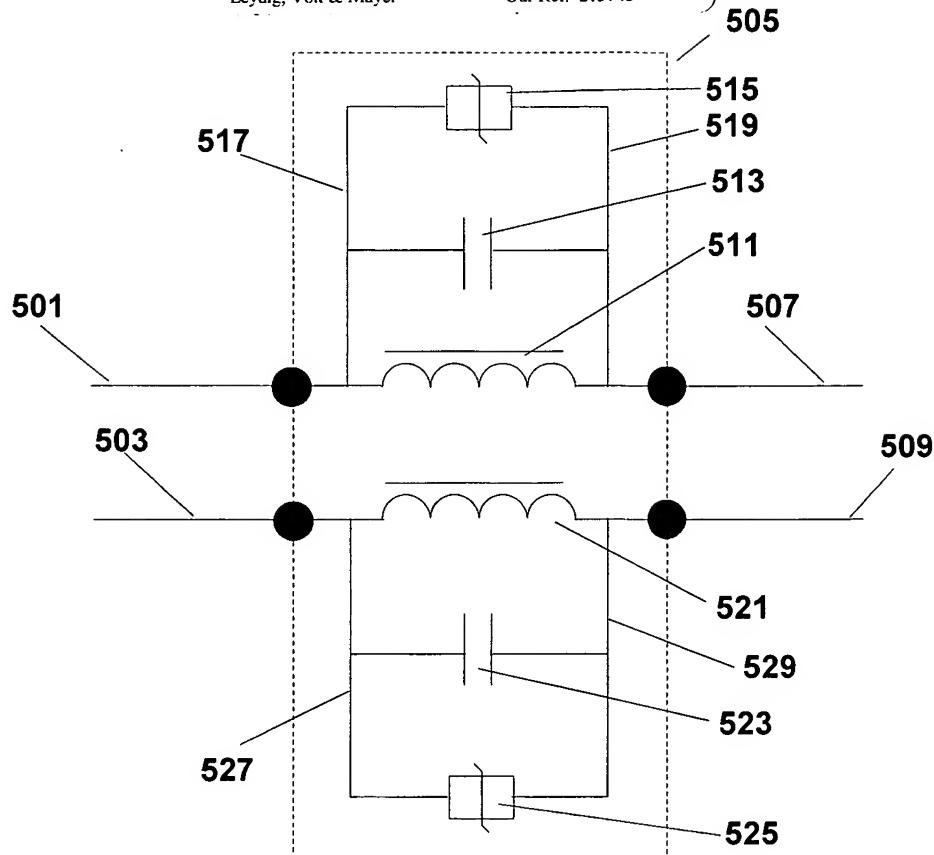


FIG. 5

601

603

605

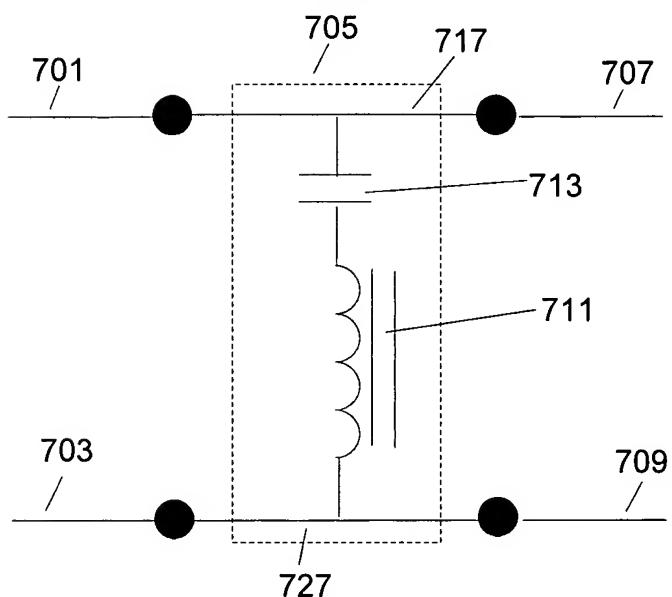
Distance upstream from prior ADSL Line Conditioner		When terminating cable at a subscriber's location	When terminating cable into another ADSL Line Conditioner
1,000 feet	0.30 km	Connect directly to subscriber	Install ADSL Build-Out A
2,000 feet	0.61 km	Connect directly to subscriber	Install ADSL Build-Out B
3,000 feet	0.91 km	Connect directly to subscriber	Install ADSL Build-Out B
4,000 feet	1.22 km	Connect directly to subscriber	Install ADSL Build-Out C
5,000 feet	1.52 km	Connect directly to subscriber	Install ADSL Build-Out D
6,000 feet	1.83 km	Connect directly to subscriber	Install directly to ADSL Line Conditioner

FIG. 6

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**FIG. 7**